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ABSTRACT

This study of 416 African Education Research (AER) projects was conducted to: (a) provide information on current studies by Africans on African education; (b) provide a framework for critical analysis of research based on a classification of the issues; and (c) provide a listing and discussion of continuing research resources which would aid periodic documentation of African education research. The leading issues researched in African education were found to be (in ranked order) student evaluation, communications, political education and social policies, teaching, administration and education, education and economic development, and access to education. Among the conclusions drawn from the study are that (a) an issue-oriented classification of research simplifies prioritization of research efforts because of its functional relationship to policy making; (b) both problem- and solution-oriented research is necessary, and it is the educational administrator who should decide priorities for solution-oriented research and take responsibility for its undertaking, while the academician researches problems; and (c) similarities of the patterns of the issues from country to country in Africa suggest that the problems of educational development are roughly equivalent throughout. (Part two of the study is the actual classification and indexing of the 416 projects, and part three is a listing of information resources for persons who are interested in African education.) (Author/HMD)

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AFRICAN EDUCATION RESEARCH

PART ONE

ISSUES AND PATTERNS

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BY

ROSS EDGAR BIGELOW, PH.D.

MADISON, WISCONSIN

JUNE, 1974

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PREFACE

The African Education Research project is predicated on the assumption that there is a growing demand for research on education in Africa. Over the past decade we have seen an increasing receptivity in official and academic circles in Africa to the application of the scientific method, or at least a more systematic approach, to solving problems in the education sector where major portions of African national wealth are consumed. During the past several years African and non-African institutions have helped to train and put in place in universities, ministries and other posts a cadre of capable persons concerned with the problems of educational development. This project grew out of a belief that such a study could suggest better ways of articulating the work of research producers and potential users, particularly those in Africa. We also believed that this effort could draw attention to the field of education research and provide guidance to research institutions and funding agencies interested in supporting projects.

The project has been deliberately entitled "African Education Research" to indicate research by Africans on educational issues in Africa. The focus in on "African Education" projects which are currently underway or were completed during this decade. It includes systematic studies by Africans working in a variety of disciplines at the doctoral level or as academic researchers. Studies by non-Africans have been excluded, not because of any judgment of quality, but because Africans constitute the major target audience of both the African nations and the donor bodies.

For greater utility, the report has been divided into three parts: the first provides an overview and analysis of the patterns and issues; the second catalogs the projects and retrieval devices; and the third presents resources which will aid continuing research on African education.

It is difficult to adequately acknowledge the help which has been given by so many individuals and institutions to permit this project to come to conclusion in the six months available for it. Institutions which have been consulted during the survey are listed in Appendix A (Principal Sources of Information) found at the end of Part One. Special thanks go to Mr. Leo Fernig of the International Bureau of Education (IBE/UNESCO) in Geneva, Mrs. Merran Fraenkel of the Research Information Liaison Unit of the International African Institute in London, Dr. Sam Cookey of the Commonwealth Secretariat in London, Miss Belinda Wood of the Documentation Centre of the Association of African Universities in Accra, Dr. Shirley Fisher of the Overseas Liaison Committee in Washington, Gail Von Hahmann of the African Studies Association (United States) in Waltham, Massachusetts, Messrs. Sven Grabe and Jan Versluis of the Manpower and Employment Division of the International Labour Office in Geneva, Professor David Wiley, Chairman, African Studies Program at the University of Wisconsin at Madison, and my colleagues in the Ford Foundation in Lagos and New York, for providing information and arranging contacts. I also gratefully acknowledge the full financial support for the project rendered by the Ford Foundation.

I am particularly indebted to Professor James R. Donoghue, Institute of Governmental Affairs, University of Wisconsin-Extension and his staff for acting as host, for providing secretarial and other facilities, and for Professor

Donoghue's personal support and commentary at all stages.

The project would not have been completed at all without the tireless assistance, organizational and information skills, and collegial support of Mrs. Eliza T. Dresang over the final four months of the work. She assisted with the preparation of many project entries in Part Two, and the compilation of information on bibliographies and continuing research sources in Part Three.

Finally, I pay tribute to my wife Elaine, who, despite a major interruption to deliver and care for a three-month premature baby, managed to contribute her labor and encouragement to this project.

In expressing gratitude for the aid of these many people and institutions I accept responsibility for any errors of omission or commission or inaccurate judgment contained in the report. These, as well as the opinions expressed, are the sole burden of the author.

R.E.B.
Madison, Wisconsin
June, 1974

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INTRODUCTION

The role of education research in policy making is still emerging in Africa, as it is in many other parts of the world. Research allocations represent very minor portions of total educational budgets, and the function of research within African national programmes for educational development is seldom clearly defined. Among administrators research is normally seen within the framework of educational planning.[1] But the decision maker in an African Ministry of Education seldom has the apparatus or personnel specifically designated to systematically study school problems or educational issues that form the stuff of policy.

Policy makers differ in their views concerning the role of research. Some may view research as complementary to political decision making, tapping their own experience or that of advisors in a systematic manner, or using research findings which are immediately accessible, or initiating limited studies to justify programme decisions. Other administrators believe that "research" has no significant role in administration, that it is essentially the prerogative of an "ivory tower elite", and that such "research", even when focusing on topics with policy implications, can have little impact on decisions which are basically "political." One need not contest an administrator's assertion that "research" is no substitute for educational experience; or that scientific investigation is no surrogate for administrative intuition. But the administrator who so asserts probably conceptualizes "research" as a narrowly academic exercise.

The African administrator who is concerned about the lack of articulation between decision-making and on-going research in academic institutions probably views this problem from a different perspective than his academic cohort. The administrator is concerned with making policy decisions related to major investments and optimum allocation of scarce resources for education without answers to basic questions. For example, key issues with which he may be concerned are the efficient use of facilities and personnel, the value and impact of new curricula, wastage, manpower needs and development, and teacher preparation and upgrading. On the other hand, although researchers may or may not be interested in the practical problems of administering education in a developing society, their achievement orientation is commonly more toward professional fulfillment and the pursuit and dissemination of knowledge.

The role of research in policy formulation might be more clearly understood if we look at it as functionally differentiated into several types: (a) basic research, designed to increase the sum total knowledge without regard to immediate applicability; (b) problem-oriented research, aimed at providing an understanding of the context and proposing alternative solutions

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[1] International Institute for Educational Planning, *Educational Planning: An Inventory of Major Research Needs* (Paris: IIEP, 1975), p. 12 f. Chapter 1, "The Role of Research in Educational Planning," in this report, provides an excellent overview of this topic.

to an immediate and well-defined issue; and (c) solution-oriented research,[2] having the purpose of resolving a problem using an array of policy choices and projected consequences in combination with experience and intuition. The first two types are normally considered the responsibility of those in the academic world, and the latter that of the policy makers. However, the three categories are not necessarily mutually exclusive; they can be considered archetypes along a continuum of research.

PURPOSES

The African Education Research project is explicitly intended to identify interfaces between African research and the issues of education, as perceived by Africans. It is also implicitly concerned with drawing attention to the field of policy-related education research and with providing guidance to research institutions and funding agencies interested in supporting research projects.

In determining the products of this project we have tried to assess what would be most useful to African administrators, academics, and others concerned with national issues of African education. Specifically, the purposes have been to:

(a) provide information on current or recently completed studies by Africans on education in Africa in a form which is retrievable by researchers and research users;

(b) provide a framework for critical analysis of research based on a classification of the issues of African education; and

(c) provide a listing and discussion of continuing research resources which would aid periodic documentation of African education research.

The project is intended to be indicative rather than exhaustive, and, if useful, could lend itself to being followed up on a systematic basis by African institutions.

PHASES OF THE PROJECT

This project has encompassed several phases over a six-month period. An initial phase consisted of formulation of the project based on reflection on personal experience with African education over the past decade. A research classification of educational issues was created.

Following this, there was a period of data collection from secondary sources of information in Africa, Europe and North America (refer again to Appendix A, Part One). No questionnaires were mailed out. A schedule of information on projects was developed, tested and revised (see Appendix B).

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[2] "Solution-oriented research" is a term used slightly differently by David Court to signify what he considers the task of Kenyan social scientists, viz. "to present evidence in ways which identify solutions and their variable consequences." David Court, "An Inventory of Research on Education in Kenya," *Discussion Paper No. 108* (Nairobi: Institute of Development Studies, May, 1971), p. 34. Here, we are viewing "solution-oriented research" as basically the task of administrators.

Existing directories and other literature from African institutions, international bodies and documentation centers were reviewed using University of Wisconsin-Extension as a base of operations. Visits were made to several centers in Geneva, London, Paris, New York, and Washington, D.C., as listed in Appendix A. Previous visits to the Association of African Universities in Accra, Ghana, and documents collected from African universities and other research institutions complemented this effort. A formal retrieval system for project listings, discussed below, was also developed.

A third phase consisted of reclassification of research project issues based on interviews with a select group of Africans in the United States and on experience gained through collation of project data. Project write-ups and the search for bibliographical and continuing research resources on AER continued. Unfortunately, it was not possible to have a period of field verification or interviews with researchers and research users in Africa.

Project data were tabulated and analyzed in the final phase. An overview of the issues and patterns of AER was written and the full body of material was collated, cross-referenced, and reproduced in this report.

THE ISSUES OF AFRICAN EDUCATION

Any classification of a body of data is a subjective attempt to organize information in a way which is useful to its users. Some classifications, for example, the Library of Congress system, have become formalized, while others, such as the division of departments of a university, vary significantly from place to place and over time. In the case of education research, there is no classification which has become standardized. The academic world, which has as a major function the creation of new perspectives on existing knowledge through developing theoretical frameworks, has normally divided education research by disciplinary orientation. This is useful to the discipline-oriented academic user.

However, it is not clear that such a classification is equally functional for a policy maker wishing to use the products of research. On the contrary, the administrator is more likely to be confronting problems or issues which require a solution-orientation and the aid of a variety of disciplines. Disciplines which may have roles to play, such as pedagogy, educational psychology, and linguistics and languages, sociology and other social sciences, generally overlap in subject matter. Thus we find, on the one hand, discipline-oriented research which may focus on a multiplicity of issues, and on the other hand, issue-oriented research which is multi-disciplinary in character.

The AER project takes the stance that the problems of education in Africa are so pressing that there is a great need for multi-disciplinary and pragmatically-focused research. We realize that implicit in this position is the substantially unconfirmed assumption that research can make a difference in educational planning and administration. The view of the scientist is that research can speed up the process of finding solutions to problems which might be "discovered" anyway in the normal give and take of human activity. We believe that if education research is to have impact on social change, it should be ordered by the issues of education, and that an issue-based classification more adequately coincides with perceived problems and potential solutions.

Classifying the Issues. In formulating this classification of AER issues, there is no claim of being free of bias. At best the framework is subjective and suggests issues at fixed points in time and space. There is an implicit need to alter any arbitrary classification as the body of knowledge increases and as times and circumstances change. It is our desire to suggest a classification, and, regardless of its accuracy or lack of it, to demonstrate something of what might be done through systematic AER documentation and analysis.

The classification described below is the result of a series of three approximations. The first approximation was a product of the personal assessment of the problems, goals and obstacles of educational development in Africa (see Appendix C at the end of this Part). Eight issue clusters were identified: administration and expansion, access, efficiency of system, assessment of student achievement, learning-teaching-growing, media, political development, and general and other issues.

A second approximation (see Appendix D) was generated through informal interviews with several Africans in the United States and after further reflection. The number of clusters was reduced from eight to seven[3] and the classification was subjected to some reorganization. An attempt was made to resolve an overlap of the sections on "Assessment of Student Development" and "Teaching". The former was thus focused on student evaluation and the latter on the teacher's role and the development of the teacher. Other issue clusters also were altered slightly to more closely conform to the apparent problem foci of projects.

The third approximation of the issues (see Appendix E) was developed to permit a better fit between the statement of issues and the educational descriptors used in the *UNESCO/IBE Education Thesaurus* (Paris: UNESCO, 1973). The expression of the nature of the issues was changed only slightly, but enough to facilitate data retrieval on the projects.

The classification which emerges could be further tested against the sorts of issues that headline in periodicals and newspapers in and on Africa. Though no systematic effort has been made to do this, it is felt such an exercise could aid refinement of the statements of issues. A more thoroughgoing procedure for testing the classification would be to directly sample African opinion, including strata of decision makers,[4] educators and academics, and observers from outside education.

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[3]The "General and Other" category was dropped for lack of utility. Projects located therein in the first approximation were transferred to an expanded category on "Political and Social Development" in the second approximation.

[4]An impression of which issues are perceived as most significant among francophone educational administrators can be gleaned from the summary of resolutions of the French-sponsored annual and semi-annual meetings of African ministers of education. Aside from general concern about technical assistance and programme adaptation, the major issues addressed by resolutions over the period 1960-1969 were (with number of resolutions in parentheses): (a) teaching and pedagogy (42), (b) students (training, scholarships, etc.) (26), (c) educational planning and statistics (10), (d) technical education (9),

Multi-Issue Projects. We find that contemporary education research projects on Africa often have more than one issue orientation. For example, a study of correspondence education for teacher education is concerned with the issue of extending education to persons beyond the reach of formal training facilities (Issue 63 of the third approximation, Appendix E) and with the issue of properly preparing teachers (Issue 53). Thus a question is raised concerning the efficacy of arbitrarily classifying a multi-faceted project as a singular item within a paradigm. Such a dilemma confronts any classifier in the social sciences, and even in the physical sciences. But just as a book has a principal focus and can and must be cataloged in a single place in the library, so too an AER project can be assigned a single place representing its primary focus in the classification of issues. Indexing and cross-referencing by issue-related descriptors provides a means of determining other issue foci of projects.

Seven Issues of African Education - 1974. The seven "clusters" of issues of African education which have been identified are: (1) administration and educational development, (2) access to education, (3) education in economic development, (4) student evaluation, (5) teaching, (6) communications, and (7) political education and social policies. Each of these is discussed below (refer to Appendix E, Part One for the classification of issues). Research projects (listed in Part Two) are presented to exemplify each issue cluster.

(1) Administration and educational development of the formal system are principal concerns of education policy makers, planners and national leaders in Africa. Well-timed and appropriate planning, the day to day problems of management, and policy implementation to meet current and anticipated future expansion of education programmes are major tasks. Concomitantly, there is need for overcoming the ubiquitous problems of physical constraints on expansion through capital outlay, building and construction programmes. Budgeting and financial policy are vehicles for this. Lastly, the administrator is limited in the expansion of education by the number (and quality) of personnel available to staff the country's schools.

An example of a current research project which is focused on issues of administration is entitled "Fiscal Capacity of the Six Northern States of Nigeria and their Comparative Resource Allocation to Education," (see project 238 (Na-1304) in Part Two). The researcher, who is working on a doctoral programme in the United States, has been sponsored by his state government to study financial needs and budgetary allocations with a view to formulating a

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(e) examinations (5), (f) rural development (5), (g) audiovisual methods (4), (h) women's education (4), and (i) libraries (2). Association Universitaire pour le Developpement de l'Enseignement et de la Culture en Afrique et a Madagascar (AUDECAM), *Etudes: Conference des Ministres de l'Education Nationale des Etats Africains et Malgache d'Expression Francaise*, (No. 3) (Paris: AUDECAM, 1969).

framework for operational planning and budgeting for that state. This is a good example of problem-oriented and policy-related education research.

(2) Access to education is an issue for parents and students in Africa, as well as those who champion the rights of the educationally under-privileged and disenfranchised. Education is the main means of social mobility and is perceived as the best way open to parents and children to cut risks and "guarantee" future security and success. Educational demand in most areas exceeds the capacity of African nations to fully respond. Educational opportunity, selection and admission to schools are more limited among rural populations, certain language groups, and the physically handicapped, for example. One also finds that weak family-school relationships may inhibit acceptance of formal schooling among some groups. Cost factors also can and do limit access to facilities. Providing adequate women's education is another problem deserving special attention in Africa. The access cluster of issues probably impinges on the lives of more Africans than any other issue group, though this is not necessarily reflected by the amount of programme development or research.

An example of research on an access issue is "Relative Performance of Urban School versus Rural School Candidates in Selective Entrance Examinations," (see project 160 (WA-2206) in Part Two). The researcher is addressing himself to the alleged better performance of students from urban areas over their rural counterparts on common entrance exams set by the West African Examination Council. An attempt will be made to identify the causes of the differences, if any. It is assumed that an implicit intention of the project is to determine whether the common entrance exam is truly common or is limiting access to education for a segment of the West African student population.

(3) Education in economic development is an issue among policy makers, especially those not directly responsible for educational administration, such as economic and manpower planners, industrial trainers, agricultural economists, and non-formal educators. High wastage rates and the unemployed school leaver problems of most African countries make manifest the importance of maximizing the efficiency of education in the economic system. Manpower development must be matched to manpower demand. Vocational development and literacy training are needed as a part of industrialization and agriculturalization programmes. In this context, employment and productivity are often at issue, being seen as the objectives of educational development.

An example of research on the issue of education in economic development is "Education and Employment: A Study of Kenyan Secondary School Leavers", (see project 56 (Kn-3424) in Part Two). The researchers have concerned themselves with the employment records and educational histories of a sample of students leaving secondary school during their fourth year. Family backgrounds, career choices, and absorption by the labor market have been considered as factors influencing leaving. In addition to better understanding the problem, an attempt has been made to determine how career planning and curriculum could be altered to decrease school leaving and increase employability.

(4) Student evaluation is a major issue for educational institutions. It is important because it not only provides a measure of pupil success/failure or development but also because it can indicate the effectiveness of the institutions in reaching their own goals. Tests may be constructed to evaluate achievement, learning and performance, to scale personality, behavior and attitudes, to measure cognitive development, aptitude, intelligence and perception, to provide guidance and counselling toward aspirations and careers, and to assess physical development and factors of nutrition and health. Student evaluation is an issue among the students themselves and among teachers, school administrators, and testing agencies.

An example of research on a student evaluation issue is "Investigation among Ugandan Children of Some Aspects of Piaget's Learning Theory", (see project 127 (Ug-4412) in Part Two). The researcher has investigated thought processes among primary school children drawn from five different ethnic populations in Uganda. Operational thinking is assessed using the theoretical framework of Piaget. This is a type of basic research in Africa, paralleling comparable studies of children in Europe and North America, which may or may not have immediate application to the school, but contributes to the storehouse of knowledge.

(5) Teaching is an issue not only of teachers but of administrators concerned with the quality of education. Educational principles and cultural foundations are issues because they represent the philosophy of an educational system and the essence of what is considered fit and proper to teach to school children. Pedagogy, teacher attitudes, the processes of preservice and in-service teacher education, and the classroom environment and social relationships are related issues in the teaching "cluster".

An example of research on the issue of teaching is a project sponsored by the Association for Teacher Education in Africa (ATEA) concerning "African Foundations of Education", (see project 11 (Af-5106) in Part Two). Several Africans representing countries in anglophone Africa are producing case studies on philosophies of education which underlie teacher education and educational systems in Africa. The end product of the project is intended to provide educational foundations in the preparation of primary and secondary school teachers.

(6) Communication is a broad term covering a set of related issues. Communications through language, curriculum, extension, the mass media, audiovisual aids in the classroom, and through teacher media centers and libraries are paths to increasing the impact of education in the several contexts in which it is proffered. Academics in a broad spectrum of disciplines, as well as administrators, are concerned with the ways of communicating educational subject matter to users.

An example of research on communications issues is the Yoruba-English Primary Project, (see project 333 (Na-6204) in Part Two). The objective of this project is to increase the quality of primary education in circumstances where it is known that a majority of children experience terminal education during primary school. The issues of curriculum and language, as well as teacher education, are being tackled simultaneously. Experimental groups

receive instruction in the mother tongue, Yoruba, use a Yoruba curriculum, and study English as a second and distinct language. Control groups follow Western State policy of using Yoruba as the medium in the first three years and English in the last three, but with new curricula in the two languages. Inservice teacher training is being altered to complement the new language approaches. Apart from research results, the project seeks to provide a new policy alternative to the Western State in primary education.

(7) Political education and social policies comprise a seventh issue cluster. Governments (and citizens) are concerned with how best to use education to achieve national goals, equity, social justice, and the "good life". This set of issues includes the revelation of educational history as a basis for fostering cultural pride and nation building, political socialization as a means of furthering nationalism, and the roles of social integration, indigenous philosophy, and religious education in achieving national aims.

An example of the political-social issue cluster is a project undertaken at the Institute of Education at the University of Dar-es-Salaam, Tanzania, on "Self-Reliance Activities in Schools and Youth Participation in Village Rural Development", (see project 103 (Tz-7213) in Part Two). It consists of surveys of primary school activities in two towns to assess the scope and changing attitudes, political socialization and development of nationalism among pupils. The project is funded by the University. Presumably the project will provide case study evaluations of the degree to which the national policy of "Education for Self-Reliance" is being achieved.

PATTERNS OF AFRICAN EDUCATION RESEARCH

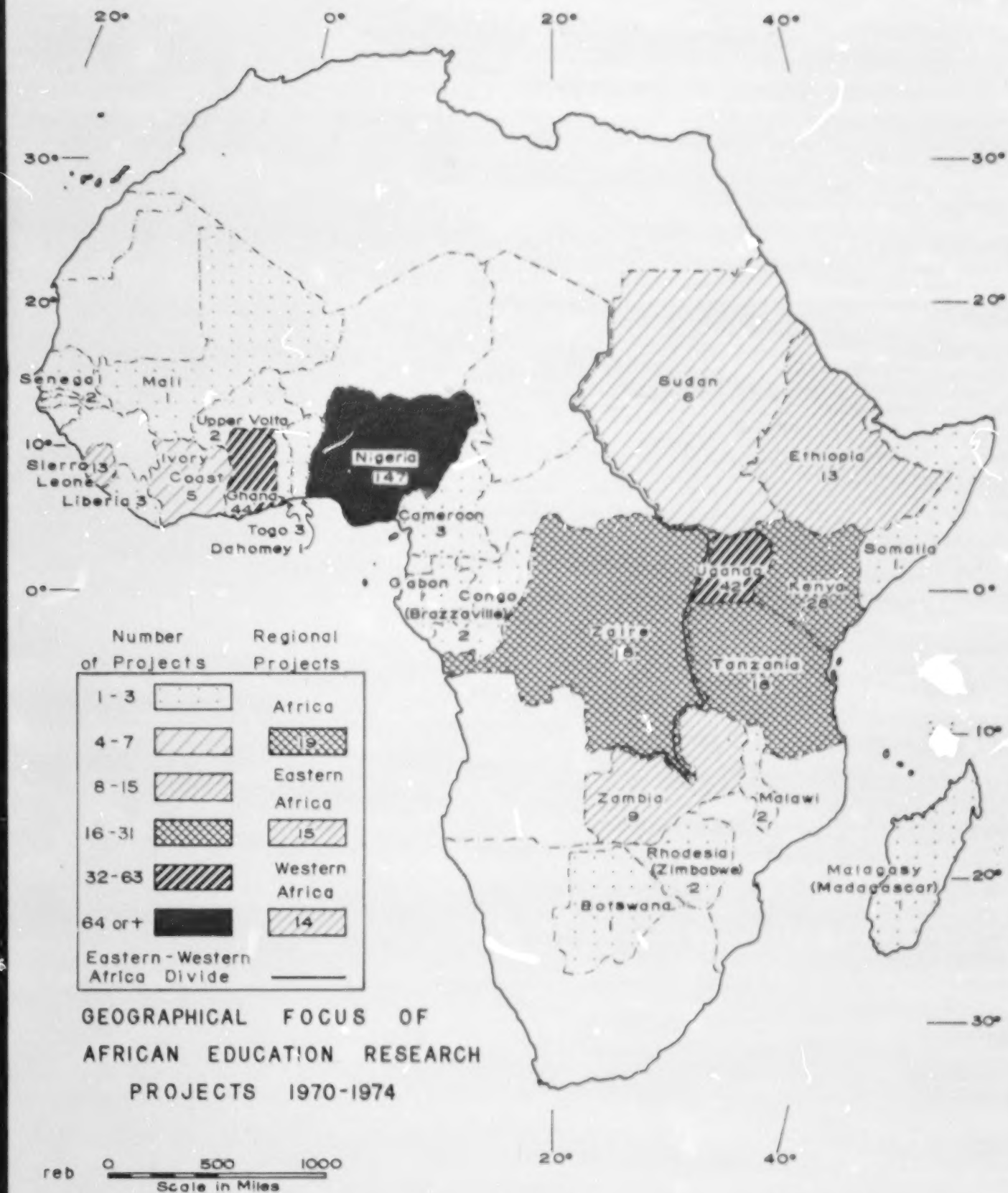
In this section, we will look at the patterns of African Education Research projects and compare these patterns to the issues of education classified above.

Geographic Focus. The geographical focus of AER projects over 1970-1974 is shown in Map 1. Of the 416 projects covered in this survey, 88% (368 projects) are focused on countries or sub-country areas, and about four per cent each are concentrated on Eastern Africa (15 projects), Western Africa (14 projects), or Africa as a whole (19 projects).

Among the country-focused projects, there is a mean number of projects per country of 13.6 and a median of three, ranging from one project each in Botswana, Malagasy (Madagascar), Somalia, Dahomey, Gabon and Mali to 147 projects in Nigeria. Seventy per cent of the country-focused research is aimed at political units in Western Africa, and 30% on Eastern Africa.

The concentration of country-focused research in general reflects the population and educational development of individual countries, as well as the national origins of the African researchers[5], (see Appendix E at the

[5] A source of error in generalizing here may be a bias in data retrieval in favor of countries which produce more information on research activities.



GEOGRAPHICAL FOCUS OF AFRICAN EDUCATION RESEARCH PROJECTS 1970-1974

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end of Part One). Countries with the largest number of projects are Nigeria (147), Ghana (44), Uganda (42), Kenya (28), Tanzania (18), and Zaire (18). Each of these has a population of about 10 million or more and estimated national literacy rates of 20-40 per cent. Other populous African nations such as Ethiopia and Sudan have more than 10 million people, but have estimated literacy rates well below twenty per cent.

Research Institutions in Africa. The known volume and distribution of education research projects undertaken by Africans in tropical African institutions over the period 1970-1974 is depicted in Map 2. There are 35 institutions; these are listed in Table 1, along with the abbreviations used on Map 2, and tabulations of projects disaggregated by issue. A total of 309 projects have been tabulated which represents 74% of all projects covered in the survey. The other 26% are projects undertaken by Africans outside Africa.

The map clearly demonstrates that AER is highly concentrated by institution, both in Eastern and Western Africa. There are ten institutions in Eastern Africa in which 106 education research projects have been undertaken by Africans, and 25 institutions in Western Africa where 203 projects are being carried out. Research is shared among a proportionately larger number of institutions in Western Africa.

The most productive institutions tend to be those which have been established longer. The leading centers are the University of Ibadan (57 projects), Makerere University (47 projects), and the University of Cape Coast (23 projects). The leading institution in francophone Africa is Université Nationale du Zaire (UNAZA) (12 projects). Ibadan and Makerere were established in 1948. Though Cape Coast and UNAZA (Kisangani Campus) were not founded until 1962, they were associated with older institutions in earlier years, viz. the University of Ghana (founded in 1948) and the Kinshasa campus (founded in 1954), respectively.[6]

Issues under Study. The issues of education addressed by African researchers in 309 projects in institutions in Africa are indicated in Table 1. The distribution of African education research by geographical focus and issue for all 416 projects covered in the survey is shown in Table 2. (Again, refer to Appendix E for descriptions of the issues.) Both tables demonstrate that the leading issues are (1) student evaluation (category 40), (2) communications (60), followed by (3) political education and social policies (70), and (4) teaching (50). The least attention has been given to the issues of access to education (20).

There is much similarity in issue orientation from one institution to another. We do not find a pattern of clustering around certain issues in institutions. The most active research institutions, Ibadan and Makerere, have projects in all seven categories of issues. Student evaluation is the

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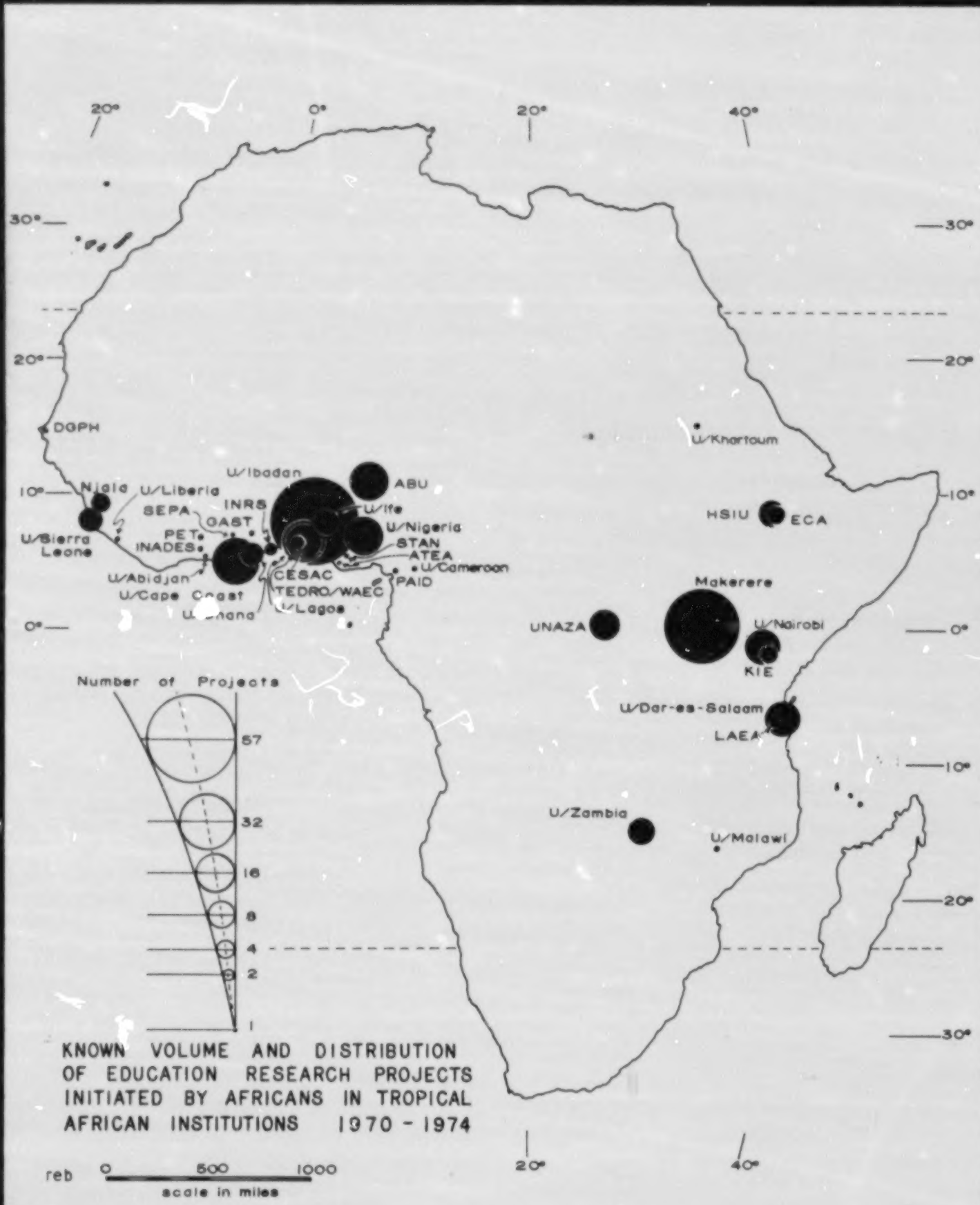
[6] Each of the four institutions have experienced several changes in constitution and name over the colonial and post-colonial periods of their existence.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U/Cape Coast
U/Ghana
U/Ibadan
ABU
U/Ife
U/Nigeria
STAN
ATEA
U/Cameroon
CESAC
TEDRO/WAEC
PAID
U/Lagos
U/Khartoum
HSIU
ECA
Makerere
UNAZA
U/Nairobi
KIE
U/Dar-es-Salaam
LAEA
U/Zambia
U/Malawi
Number of Projects
57
32
16
8
4
2
1
KNOWN VOLUME AND DISTRIBUTION OF EDUCATION RESEARCH PROJECTS INITIATED BY AFRICANS IN TROPICAL AFRICAN INSTITUTIONS 1970 - 1974
reb
0
500
1000
scale in miles

Table 1. Institutions in Africa in which Education Research by Africans has been Undertaken, 1970-1974

Institution/Country Location	Abbreviation	Issue Classification (# projects)							
		10	20	30	40	50	60	70	Total
Eastern Africa (subtotal)		8	7	14	31	8	27	11	106
University of Dar-es-Salaam, Tanzania	U/Dar-es-Salaam	0	1	0	2	2	6	4	15
Economic Commission for Africa, Ethiopia	ECA	0	0	3	0	0	0	0	3
Haile Sellassie I University, Ethiopia	HSIU	3	2	1	0	1	1	0	8
Kenya Institute of Education, Kenya	KIE	0	0	0	3	0	1	0	4
University of Khartoum, Sudan	U/Khartoum	0	0	0	0	0	0	1	1
Language Association of Eastern Africa, Tanzania	LAEA	0	0	0	0	0	2	0	2
Makerere University, Uganda	Makerere	3	1	4	19	5	10	5	47
University of Malawi, Malawi	U/Malawi	0	1	0	0	0	0	0	1
University of Nairobi, Kenya	U/Nairobi	1	2	4	4	0	3	1	15
University of Zambia, Zambia	U/Zambia	1	0	2	3	0	4	0	10
Western Africa (subtotal)		7	6	17	64	25	58	26	203
Université d'Abidjan, Ivory Coast	U/Abidjan	0	0	0	0	0	1	0	1
Ahmadu Bello University, Nigeria	ABU	0	2	2	5	0	9	2	20
Association for Teacher Education in Africa, Nigeria	ATEA	0	0	0	0	1	0	0	1
Université Fédérale du Cameroun, Cameroon	U/Cameroon	0	0	0	1	0	0	0	1
University of Cape Coast, Ghana	U/Cape Coast	3	0	3	7	4	2	4	23
Comparative Education Study and Adaptation Centre, Nigeria	CESAC	0	0	1	0	0	3	0	4
Délégation Générale de la Promotion Humaine, Senegal	DGPH	0	0	1	0	0	0	0	1
Ghana Association of Science Teachers, Ghana	GAST	0	0	0	0	0	1	0	1
University of Ghana, Ghana	U/Ghana	0	0	0	0	1	2	2	5
University of Ibadan, Nigeria	U/Ibadan	1	1	4	19	7	17	8	57
University of Ife, Nigeria	U/Ife	0	0	0	2	1	3	3	9
Institut Africain pour le Développement Economique et Social, Ivory Coast	INADES	0	0	0	0	0	1	0	1
Institut des Recherches Pédagogique, Ivory Coast	IRP	0	0	0	0	1	0	0	1
Institut National de Recherche Scientifique, Togo	INRS	0	0	0	0	0	1	1	2
Programme d'Education Télévisuelle, Ivory Coast	PET	0	0	0	0	0	1	0	1
University of Lagos, Nigeria	U/Lagos	0	1	2	6	3	1	3	16
University of Liberia, Liberia	U/Liberia	0	0	0	0	0	1	0	1
University of Nigeria, Nigeria	U/Nigeria	2	1	3	8	0	5	1	20
Pan-African Institute for Development, Cameroon	PAID	0	0	1	0	0	0	0	1
Science Education Programme for Africa, Ghana	SEPA	0	0	0	0	0	1	0	1
Science Teachers Association of Nigeria, Nigeria	STAN	0	0	0	0	0	1	0	1
University of Sierra Leone at Freetown, Sierra Leone	U/Sierra Leone	0	0	0	1	1	4	1	7
University of Sierra Leone at Njala, Sierra Leone	Njala	0	0	0	1	2	1	0	4
West African Examinations Council's Test Development Research Office, Nigeria	WAEC/TEDRO	1	1	0	9	0	1	0	12
Université Nationale du Zaire, Zaire	UNAZA	0	0	0	5	4	2	1	12
Totals		15	13	31	95	33	85	37	309

Table 2. Distribution of African Education Research
By Geographical Focus and Issue

	Issue Classification (# projects)							
Geographical Focus	10	20	30	40	50	60	70	Total
Africa	4	0	4	2	2	5	2	19
Eastern Africa	1	0	0	7	1	4	2	15
Botswana	0	0	0	1	0	0	0	1
Ethiopia	5	2	1	0	1	3	1	13
Kenya	3	2	4	8	0	6	5	28
Malagasy (Madagascar)	1	0	0	0	0	0	0	1
Malawi	0	1	0	0	1	0	0	2
Rhodesia	0	0	0	0	0	1	1	2
Somalia	0	0	0	0	0	0	1	1
Sudan	1	0	1	0	2	1	1	6
Tanzania	1	1	0	2	2	7	5	18
Uganda	2	1	5	14	6	9	5	42
Zambia	1	0	1	3	0	4	0	9
Eastern Africa subtotal	15	7	12	35	13	35	21	138
Western Africa	2	1	0	7	1	2	1	14
Cameroon	0	0	0	1	0	2	0	3
Congo (Brazzaville)	0	0	0	2	0	0	0	2
Dahomey	0	0	0	0	0	0	1	1
Gabon	0	1	0	0	0	0	0	1
Ghana	5	0	4	10	7	11	7	44
Ivory Coast	0	0	0	1	1	3	0	5
Liberia	0	0	0	0	1	1	1	3
Mali	0	0	0	0	0	1	0	1
Nigeria	9	7	12	47	13	38	21	147
Senegal	0	0	1	0	1	0	0	2
Sierra Leone	1	0	0	4	3	4	1	13
Togo	1	0	0	0	0	1	1	3
Upper Volta	0	0	0	0	0	0	2	2
Zaire	0	0	1	7	4	3	3	18
Western Africa subtotal	18	9	18	72	30	63	37	259
GRAND TOTAL	37	16	34	116	46	106	61	416

first concern of both, followed by communication issues. The Universities of Cape Coast, Nigeria, Lagos, and Nairobi have research on-going on six different issue clusters. Student evaluation issues are also receiving the greatest attention in these institutions. Institutions with very few projects tend to undertake research on communications more than other issues.

Institutions in Eastern Africa have much the same spread of issue-orientation as those in Western Africa, as shown in Table 3. There is a slight trend, in Eastern African institutions, to devote proportionately more attention to the issues of (1) administration and educational development (10), (2) access to education (20), and (3) education in economic development (30), with a complementary emphasis in Western African institutions on the other four issue categories.

Table 3. Per Cent Distribution of Education Research by Issue-Orientation of Projects in Institutions in Eastern and Western Africa 1970-1974[a]

Region	n	Issue Classification							Total
		10	20	30	40	50	60	70	
		(per cent)							
Eastern Africa	106	8	7	13	29	8	25	10	100
Western Africa	203	3	3	8	32	12	29	13	100
Africa	309	5	4	10	31	11	27	12	100

[a] based on data in Table 1.

Table 4 suggests that there is little difference in the issue-orientation of education research on francophone Africa. Student evaluation and communication issues are the highest priorities, as is true for non-francophone Africa. Issues of access to education are the least studied.

Table 4. Per Cent Distribution of Education Research Projects by Geographical Focus and Issue in Francophone and Non-Francophone African Countries 1970-1974[a]

Geographical Focus	n	Issue Classification							Total
		10	20	30	40	50	60	70	
		(per cent)							
Francophone Countries[b]	39	5	3	5	28	15	26	18	100
Non-Francophone Countries	377	9	4	8	28	11	26	14	100
Africa	416	9	4	8	28	11	25	15	100

[a] based on data in Table 2.

[b] Includes Cameroon, Congo (Brazzaville), Dahomey, Gabon, Ivory Coast, Malagasy (Madagascar), Mali, Senegal, Togo, Upper Volta and Zaire.

There is some difference in the issue orientation of Africans undertaking 309 projects in Africa and that of African researchers undertaking 107 projects outside the continent. This is demonstrated in Table 5. Proportionately larger numbers of African researchers outside Africa are focused on the issues of (1) administration and educational development and (2) political education and social policies. There is correspondingly less attention being paid to student evaluation and communication issues than among African researchers working in

Table 5. Per Cent Distribution of Education Research Projects by Issue among Africans In and Outside of Africa, 1970-1974.

Location of African Researcher	n	Issue Classification (per cent)							
		10	20	30	40	50	60	70	Total
In Africa	309	5	4	10	31	11	27	12	100
Outside Africa	107	20	3	3	20	12	20	22	100
TOTAL	416	9	4	8	28	11	25	15	100

Africa. Nearly all of those working abroad are studying at the doctoral thesis level. A possible explanation for the difference in issue-orientation is that educational administration and political-social issues might better lend themselves to overseas study circumstances than the other categories. Furthermore, among doctoral students sponsored by their home governments, there is some inclination to study administrative themes.

Researchers. There are 344 African researchers undertaking the 416 projects covered in this review of African Education Research.[7] This is an average of 1.2 projects per researcher. More than four-fifths of the projects are undertaken by individual researchers. Many of these are financed from personal resources. With the general exception of curriculum projects, very little of the research is under the direct sponsorship of institutions. Ninety-five per cent of the researchers study their country (or region) of origin.

Table 6 indicates the disciplines of African researchers undertaking AER projects. The table is expressed in project-researcher units, where one unit equals one researcher doing one project. Nearly two-thirds of the projects (65%) are being carried out by Africans in the various fields of education, i.e., pedagogy, adult education, special education, physical education, science education, educational administration, curriculum and instruction, art education, vocational education, etc. Another 12% are pursued by psychologists and educational psychologists, 4% by sociologists and anthropologists, and 3% by

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[7] The names and biodata of researchers are presented in the Index of Researchers in Part Two.

Table 6. Principal Disciplines of African Education Researchers[a]

Discipline	Issue Classification							
	10	20	30	40	50	60	70	Total
Education	27	10	23	81	40	91	35	307
Educational Psychology/ Psychology	1	0	2	46	7	2	0	58
Linguistics/Languages (Incl. English and French)	0	0	0	1	0	12	0	13
Economics	2	0	4	0	0	0	0	6
Political Science	1	0	0	0	0	1	5	7
Sociology/Anthropology	3	1	4	1	1	1	9	20
Art/Theater Arts	0	0	0	0	1	0	1	2
History/Law	1	1	0	0	0	0	3	5
Religion	0	0	0	0	0	0	3	3
Geography	0	0	0	0	1	0	0	1
Communications	0	0	0	0	0	1	0	1
Unspecified or Unknown	3	4	5	15	5	12	4	48
TOTAL	38	16	38	144	55	120	60	471

[a]In project-researcher units. One unit equals one researcher doing one project.

linguists and language specialists. Other studies are being conducted by political scientists, economists, historians and lawyers, religion specialists, theater artists, and persons in geography or communications.

Target Groups. Each AER project has been classified by the level of its target group (see the Key to Issue-Target-User (ITU) Code in Part Two.) This is intended to identify which groups within or outside the formal system of education are being researched. Table 7 shows the distribution of target groups by issue. Just over half (52%) of the projects are focused on single target groups. Most targeted research is on secondary education (20%), followed by pre-primary and primary education (16%), tertiary education (9%) and extra-systemic education (7%).[8] Communications issues (category 50) have the

[8]Extra-systemic education is defined as education outside the formal system.

highest proportion of targeted projects (61%) followed by projects on student evaluation (58%) and teaching issues (57%). Targeted communications research is largely focussed on the secondary level (51%), while targeted student evaluation studies (46%) and teaching issue studies (35%) are principally concerned with the pre-primary and primary level.

Table 7. Level of Target Group by Issues of African Education Research, 1970-1974.

Level of Study Target Group	Issue Classification (# projects) 10	20	30	40	50	60	70	Total	%
0 General, Multi-level, or unspecified by level	19	12	17	49	20	42	40	199	48
1 Preprimary and primary education	0	1	4	31	9	17	5	67	16
2 Secondary education[a]	5	0	6	24	7	33	9	84	20
3 Tertiary education[b]	10	3	3	10	8	2	3	39	9
4 Extra-systemic education[c]	3	0	4	2	2	12	4	27	7
TOTALS	37	16	34	116	46	106	61	416	100

[a]All postprimary and pretertiary formal schooling
[b]Higher education, including university, polytechnic and advanced teacher training
[c]Nonformal, informal and adult education

Users of Research. Each project has been examined to determine the principal user group for which the research was designed. Admittedly, this has been an arbitrary process often based on limited project information. However, the comparative reading of projects has led us to believe that data were adequate to make subjective estimates of user groups.

Table 8 estimates the principal users of research, disaggregated by issue orientation, as intended by researchers. Nearly three-fourths (72%)of the 416 AER projects were aimed at academic users, including research for degree-

[8](cont.) Every country has a well-recognized education system defined (though not necessarily fully funded) by the budget of the Ministry of Education. Extra-systemic education encompasses nonformal, informal and adult education schemes funded privately or by public agencies other than the Ministry of Education.

related users (28%) such as universities and individual research done within the academic community in the pursuit of knowledge (44%). The former consists of research by doctoral-level candidates but is otherwise closely akin to the latter.[9] Academic user-oriented research may or may not correspond to "basic research". Twenty-eight per cent of the projects were aimed primarily at non-academic users, including institutions (14%), administrators in government (11%), the general public in a given country (<0.5%) or users in international bodies (3%).

Table 8. Principal Intended Users of African Education Research by Issue, 1970-1974.

Principal Intended User of Research	Issue Classification							Total	%	Combined %
	10	20	30	40	50	60	70			
	(# projects)									
1 Degree-Related User	14	3	5	24	17	21	31	115	28	72
2 Individual Academic Community	9	11	16	69	15	40	24	184	44	
3 Institution	1	1	7	18	5	20	4	56	14	28
4 Administration (Governments)	13	0	3	2	5	21	2	46	11	
5 General Public (National)	0	0	1	0	1	0	0	2	*	
6 International User	0	1	2	3	3	4	0	13	3	
TOTALS	37	16	35	116	46	106	61	416	100	100

*Less than 0.5 per cent.

The largest proportion of research aimed primarily at non-academic users is focused on communication issues (category 60) (42%), followed by projects on administration and education development (category 10) (38%), and education in economic development (category 30) (38%). Most curriculum projects (issue 62) (68%) are aimed at non-academic users. Sixty-four per cent of projects on test construction (issue 41) and 57% of research on manpower issues (issue 32) are aimed at non-academic users. No other category of issues has a majority of projects aimed at non-academic users.

[9] A few research projects being done for fulfillment of degree requirements have been classified in categories other than "degree-related user" where such decisions seemed clearly appropriate.

An idea of the issue focus of AER projects funded or administered by international bodies is suggested in Table 9. These are organizations which can influence the kind of research undertaken, though they do not carry out projects themselves. Their major focus is on communications issues (45%), followed by student evaluation (18%) and teaching issues (15%). Curriculum and language issues appear to receive special attention. However, since the number of projects is relatively low and the data are certainly not complete, generalizations here should be considered indicative only.

Table 9. Issue-Orientation of Research Funded or Administered by International Organizations Not Directly Undertaking AER Projects[a]

Funding/Administrative Organization	Issue Classification (# projects)							Total
	10	20	30	40	50	60	70	
African-American Scholars Council	1	0	1	1	2	0	0	5
Association for Teacher Education in Africa	0	0	0	0	1	0	0	1
Canadian International Development Agency	1	0	0	0	0	0	0	1
Carnegie Corporation	0	0	0	2	1	2	0	5
Center for Educational Development Overseas	0	0	0	0	0	2	0	2
Educational Development Center	0	0	0	0	0	1	0	1
Ford Foundation	3	0	3	1	0	10	0	17
International Development Association(IBRD)	0	0	0	0	0	1	0	1
International Extension University	0	0	0	0	0	1	0	1
Overseas Development Administration	0	0	0	0	0	1	0	1
Overseas Liaison Committee (ACE)	0	0	1	0	0	0	0	1

[a]Taken from Index of Institutions, Part Two, based on the 416 projects surveyed. These data should not be interpreted as fully reflecting the issue priorities of the individual organizations.

(Table 9, continued)

Funding/Administrative Organization	Issue Classification (# projects) 10	20	30	40	50	60	70	Total
UNESCO	0	1	0	2	3	9	0	15
United States Agency for International Development	2	0	0	4	2	0	0	8
World Health Organization of the United Nations	0	0	0	1	0	0	0	1
TOTAL	7	1	5	11	9	27	0	60
Per Cent	12	2	8	18	15	45	0	100

Other important questions that could be posed concerning research use are: what issues are African users concerned with? and what kind of research projects are needed for policy formulation? The AER project has not been able to systematically tackle these questions. These are subjects that deserve exploration.

SUMMARY AND CONCLUSIONS

Summary. This report has analyzed the patterns of 416 African Education Research (AER) projects, based on a classification of seven issues of education: (1) administration and educational development, (2) access to education, (3) education in economic development, (4) student evaluation, (5) teaching, (6) communications, and (7) political education and social policies.

Nearly three-quarters (309) of the projects surveyed were undertaken by Africans in Africa, and the balance (107) by Africans outside Africa. AER in Africa was found to be highly concentrated in a few (35) institutions, with the most active research institutions generally the oldest. Western Africa is the heartland of AER with seventy per cent of country-focused projects. AER patterns roughly parallel population and literacy rates; the most populous and best educationally developed countries have the most research.

The leading issues researched are, in order of importance: (1) student evaluation, (2) communications, (3) political education and social policies, and (4) teaching. The least studied issues are (5) administration and educational development, (6) education in economic development, and (7) access to education. There is no clustering around certain issues in research institutions in Africa. There is a slight tendency in Eastern African institutions to have a wider spread of issue-orientations, and thus, more attention is paid to the three issue clusters noted above which are generally the least studied. Francophone issue-orientations of research projects differ little from those in the non-Francophone countries of Africa.

The typical African researcher is doing one project in an African university which is funded from personal resources and is focused on his own country of origin. African researchers outside Africa have devoted somewhat more research to the issues of (1) administration and educational development, and (2) political education and social policies than their counterparts in Africa. Almost two-thirds of the African researchers were trained in a field of education (e.g. pedagogy, educational administration and adult education) with the rest representing other social and human sciences (e.g. psychology, linguistics, and sociology).

Just over half the projects are concerned with a single target group within or outside the formal system of education. Most targeted research is on secondary education, followed by pre-primary and primary education, tertiary education, and extra-systemic education. Most AER projects (72%) are aimed primarily at other researchers and users in the academic community. The general exceptions to this are curriculum projects, test construction research, and manpower studies, which are largely aimed at non-academic users. Among the 416 AER projects, research on communications issues (especially curriculum and language) receives the most attention and support of international organizations.

Conclusions. A word of caution is in order before drawing any conclusions about the information presented in the AER project. This document does not touch on the full range of research on African education. As noted earlier, work by non-Africans has been arbitrarily excluded. Attention is focussed on research by Africans to limit the AER project to the time available for it and to reflect the priority target audience of the African nations and the donor bodies. Furthermore, the listings are incomplete and possibly uneven in coverage. They are intended to be indicative, not exhaustive. The reader should bear these caveats in mind in interpreting the following generalizations.

1. A classification of education research based on issues represents a more powerful organizing concept than one based on disciplines because it is functionally related to policy making and provides a means of assessing research priorities.

2. Policy-related research is of two complementary types: (a) problem-oriented research which is largely the task of academicians and (b) solution-oriented research which is basically the responsibility of administrators. Both types should seek to tap the reservoir of knowledge generated by basic research.

3. Assuring that policy-related research is undertaken is the burden of the administrator, not the academic. It is his responsibility to indicate what kinds of research are needed in the planning process and what will help further national political, social and economic goals. The onus is also his for establishing a mechanism to solicit and support education research in institutions.[10]

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[10] An example of such a mechanism, albeit in the formative stages, is the Nigerian Educational Research Council.

4. However, the administrator and his advisors cannot be experts in every aspect of education. This is where research has a role to play too. Research can provide a systematic and unbiased delineation and assessment of policy options. If decision makers see research in this light, the future expansion of education in Africa could precipitate a larger role for research in policy formulation.

5. If administrators can clearly articulate their research priorities, the need for policy-related research and multi-disciplinary studies could be answered by existing research institutions, even though, as we have shown, the number of these institutions in Africa is relatively small.

6. Research by the academic community which is not directly tied to policy making can contribute to the decision-making process. A useful function would be served through the preparation of case studies, the comparative analysis of such cases, and the evaluation of previous decisions and consequences plus assessments of how other decisions might have resulted differently. Though there is already considerable idiographic research going on, much of it is not in a form readily usable by administrators. Over the coming years increasing attention should be given to nomothetic (law-giving) research to tie together common threads of educational development experience and to foster the transferability of education research from one context to another.

7. The similarity of the patterns of issues from country to country as reflected by research activity, may suggest that the problems of educational development throughout Africa are roughly equivalent. However, more work is needed in classifying and analyzing the issues.

8. The issues of education which are least studied by African researchers, viz. (a) administration and educational development, (b) education in economic development, and (c) access to education, have much relevance to policy-making and ought to receive more study in future. Where trends are found toward the clustering of institutional research in these issue areas, they should be encouraged by administrators. This is an area of possible cooperation with outside funding bodies.

9. Individual researchers who are developing projects could benefit from a conscious recognition of the issues, target groups and users of their research. It is hoped in future that a greater percentage will aim projects at users beyond the academic community.

10. The researcher with limited research experience could help himself and his users by designing projects which are limited in scope, carefully defined and reliant on empiricism. It is our experience that projects which evidence good organization also have clear issue foci, and that this good organization is reflected in the terms used by researchers in their texts and titles. The values of using precise terminology could include: (a) clarity and conciseness, (b) commonly understood definitions, (c) translatability, and (d) transferability.[11]

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[11] Again we mention the *UNESCO/IBE Education Thesaurus, op. cit.*, as a valuable tool in this process.

11. If researchers make policy recommendations on the basis of their research, it should be done with full cognizance of the range of available policy alternatives and in view of the projected consequences of each alternative.

12. The training of African Researchers is an apparent priority. The dearth of African education researchers is particularly critical in Francophone Africa. Training at the advanced academic level as well as the provision of inservice courses in research methodology could further research in countries throughout the continent.

Appendix A

PRINCIPAL SOURCES OF INFORMATION

1. African-American Scholars Council, Suite 306, 1150 17th St. N.W., Washington, D.C.
2. African Association of Correspondence Educators, Correspondence Unit, University of Nairobi, Nairobi, Kenya
3. African Bibliographic Center, P.O. Box 13096, Washington, D.C. 20009
4. African Studies Association, Research Liaison Committee, 218 Shiffman Center, Brandeis University, Waltham, Massachusetts
5. Association of African Universities, P.O. Box 5744, Accra, Ghana
6. Association for Teacher Education in Africa, Western Council-Lagos, Eastern Council-Nairobi, Headquarters-University of Lagos College of Education, Yaba, Lagos, Nigeria
7. Association Universitaire pour le Développment de l'Enseignement et de la Culture en Afrique et à Madagascar (AUDECAM), 100, rue de l'Université, Paris, France
8. Bureau Regional pour l'Éducation en Afrique (BREDA/UNESCO), 12 avenue Roume, B.P. 3311, Dakar, Senegal
9. Centre d'Analyse et de Recherches Documentaires pour l'Afrique Noire (CARDAN), 20, rue de la Barume, 75 Paris 8e, France
10. Centre for Educational Development Overseas (CEDO), Tavistock House South, London WC 1H 9LL, U.K.
11. Commonwealth Secretariat, Marlborough House, Pall Mall, London SW1, U.K.
12. Educational Resources Information Center (ERIC), ERIC/Higher Education, retrieving data from all 16 ERIC centers in the U.S., Suite 630, One Dupont Circle, Washington, D.C. 20036
13. Ford Foundation, 320 E. 43rd Street, New York, New York 10017
14. Institut d'Etude du Développment Economique et Social (IEDES), Université de Paris I, 5, rue des Colonnes du Trône, Paris 12e, France
15. Institute of International Education, 809 United Nations Plaza, New York, New York 10017
16. International African Institute, Research Information Liaison Unit, 210 High Holborn, London WC1V 7BW, U.K.
17. International Association for Cross-Cultural Psychology, Second Pan-African Congress (December, 1975), Secretariat at College of Education, Brock University, St. Catherines, Ontario, Canada
18. International Bureau of Education (IBE/UNESCO), Palais Wilson, 1211, Geneva, Switzerland
19. International Institute of Educational Planning (IIEP), 7, rue Eugene-Delacroix, Paris 16e, France
20. International Labour Office, International Labour Organization (ILO), Manpower and Employment Division, CH 1211 Geneva 22, Switzerland
21. Library of Congress, African Section, 1040C Annex, 2nd and Independence Avenues, Washington, D.C.
22. Overseas Liaison Committee, American Council on Education, Suite 320, One Dupont Circle, Washington, D.C. 20036
23. Phelps-Stokes Fund, 10 East 87th Street, New York, New York 10028
24. Teachers College, Columbia University, Institute of International Studies, West 116th Street at Broadway, New York, New York 10027
25. United Nations Educational, Scientific and Cultural Organization (UNESCO), Place de Fontenoy, 75 Paris 7e, France
26. United States Agency for International Development (USAID), Technical Assistance Bureau, Human Resources Division, 21st and C. Street, Washington, D.C.
27. University of Illinois at Urbana-Champaign, Comparative Education and African Studies, c/o 1208 West California, Room 101, Urbana, Illinois 61801
28. University of London, Institute of Education, Malet Street, London WC1, U.K.
29. University of Sussex, Institute of Development Studies, Falmer, Brighton, U.K.
30. University of Wisconsin, African Studies Program, 1450 Van Hise Hall and University Extension, 624 Lowell Hall, Madison, Wisconsin 53706

Appendix B

QUESTIONNAIRE

AFRICAN EDUCATION RESEARCH PROJECTS

(MARCH 1974)

Code

No._____ Date_____

Source_____

1. Country_____
2. Region_____
3. Project Title_____

4. Key Words/Descriptors _____

5. Description (Aims and Scope) _____

6. Date of Starting Research _____
7. Date of Completion_____
8. Methodology Yes: 1 No: 0 N.D.: 9
   - (a) Review of Secondary Sources
   - (b) Survey Research
   - (c) Comparative Analysis
   - (d) Tabular and Bivariate Analysis
   - (e) Multivariate Analysis
   - (f) Other (Specify)
   - (g) Total Methods (a-f) Employed
9. Funding Source(s) / Amount(s) (if available) _____
10. Other Sponsoring Institution(s) (if any) _____
11. Address(es) _____

12. Publications (if any) _____

13. Level of Study Target Audience _____
14. Intended Principal User of Research _____
15. Other User(s) _____

16. Issue Orientation of Research _____

17.

Researcher(s) Name(s)	Status(es)	Date(s) of Birth	Specialization(s)/ Discipline(s)	Degree(s) (Dates/ Institutions)
(a)				
(b)				
(c)				

Appendix C

EDUCATION RESEARCH CLASSIFICATION

(First Approximation)

Issue (Third and Fourth Digits)

0 General and Other
- 00 Other
- 01 History
- 02 Theory
- 03 Values
- 04 Social Structures

1 Administration and Expansion
- 10 Other
- 11 Organization and Management
- 12 Physical Planning (Supply of Facilities, Building Design-Construction, New School Location)
- 13 Financing and Budgeting
- 14 Staffing
- 15 Decentralization
- 16 Inspection
- 17 Personnel Evaluation

2 Access
- 20 Other
- 21 Demand on Facilities
- 22 Selection Process
- 23 Parental Ability to Pay
- 24 Parental Desire for "Modern" Education

3 Efficiency of System
- 30 Other
- 31 Dropouts
- 32 Manpower Supply-Demand
- 33 Basic Skills (Manual, Literacy, Numeracy)
- 34 Employment
- 35 Migration
- 36 Productivity

4 Assessment of Student Achievement
- 40 Other
- 41 Examination (Validation, Standardization, Administration)
- 42 Follow-up Study
- 43 Background Characteristics
- 44 Attitudes and Aspirations

5 Learning-Teaching-Growing (The Classroom)
- 50 Other
- 51 Student-Teacher Interaction
- 52 Pedagogy (Methods)
- 53 Psychology
- 54 Guidance and Counselling
- 55 Nutrition
- 56 Teacher Factor (Preparation, In-service, Attitudes, Problems)
- 57 Special Education

6 Communication
- 60 Other
- 61 Language
- 62 Curriculum
- 63 Mass Communications (Radio/TV/Correspondence)
- 64 Technology for the Classroom
- 65 Libraries
- 66 Teacher Media Centers

7 Political Development
- 70 Other
- 71 Citizenship
- 72 Political Socialization
- 73 Indoctrination/Propaganda
- 74 Nationalism
- 75 Brain Drain

Appendix D

EDUCATION RESEARCH CLASSIFICATION

(Second Approximation)

Issue (First and Second Digits)

10 Administration and Development
- 11 General Planning, Management and Expansion
- 12 Physical Development (Supply of Facilities, Buildings)
- 13 Financing and Budgeting
- 14 Staffing and Personnel

20 Access
- 21 Demand on Facilities
- 22 Selection Process
- 23 Parental Ability to Pay
- 24 Parental Desire for "Modern" Education
- 25 Female Education

30 Efficiency of System
- 31 Wastage (Dropouts)
- 32 Manpower Supply-Demand (In Economy, in Teaching, Brain Drain)
- 33 Basic Skills (Manual, Literacy, Numeracy)
- 34 Employment
- 35 Migration (e.g., Rural-Urban)
- 36 Productivity

40 Assessment of Student Development
- 41 Examinations Development and Role
- 42 Achievement (Learning, Performance Measurement)
- 43 Personality, Behaviour, Attitudes
- 44 Cognitive Development, Aptitude, Intelligence, Perception
- 45 Careers and Counselling (Aspirations, Guidance)

50 Teaching
- 51 Foundations (Principles)
- 52 Pedagogy (Methods)
- 53 Teacher Preparation and Inservice Training
- 54 Teacher Attitudes, Problems (Professionalism)
- 55 Classroom Relationships (Integration)

60 Communication
- 61 Language
- 62 Curriculum Planning and Analysis
- 63 Extension (Mass Communications, Correspondence)
- 64 Technology for the Classroom (Audio-Visual Aids)
- 65 Libraries and Teacher Media Centres

70 Political and Social Development
- 71 Citizenship (Study of Government)
- 72 Political Socialization (Nationalism, Indoctrination)
- 73 Social Development and Structures
- 74 Indigenous Philosophy, Educational Values
- 75 Moral and Religious Values
- 76 Historical Development

Appendix E

EDUCATION RESEARCH CLASSIFICATION

(Third Approximation)

Issue (First and Second Digits)

10 Administration and Educational Development
- 11 Planning and Management (Expansion)
- 12 Capital Outlay (for Fixed Assets), Buildings, Construction Programmes, (Physical Development)
- 13 Budgeting and Financial Policy
- 14 Personnel and Personnel Management (Staffing)

20 Access to Education
- 21 Educational Demand
- 22 Educational Opportunity, Selection, and Admission (School)
- 23 Family-School Relationship
- 24 Cost (Limitations to Parents and Students)
- 25 Women's Education

30 Education in Economic Development
- 31 Dropout Rate and School Leavers (Wastage)
- 32 Manpower Development and Manpower Needs (Including Teacher Supply-Demand and Brain Drain)
- 33 Literacy and Vocational Development (Numeracy, Basic Skills)
- 34 Employment and Migration
- 35 Productivity

40 Student Evaluation
- 41 Tests and Test Construction
- 42 Achievement, Learning, and Performance Measurement
- 43 Personality, Behaviour and Attitudes
- 44 Cognitive Development, Antitude, Intelligence and Perception
- 45 Careers, Counselling, Aspirations and Guidance
- 46 Physical Development, Nutrition and Health

50 Teaching
- 51 Educational Principles (Foundations)
- 52 Pedagogy (Methods)
- 53 Preservice Education and Inservice Teacher Education
- 54 Teacher Attitudes (Problems and Professionalism)
- 55 Classroom Environment, Social Relationships and Racial Integration

60 Communications
- 61 Language, Language Arts and Language Planning
- 62 Curriculum Planning, Curriculum Development and Curriculum Evalution
- 63 Extension Education, Mass Media and Correspondence Tuition
- 64 AudioVisual Communication (for the Classroom)
- 65 Libraries (Teacher Media Centres)

70 Political Education and Social Policies
- 71 Educational History
- 72 Political Socialization
- 73 Social Integration and Social Systems
- 74 Indigenous Philosophy and Educational Values
- 75 Moral Values and Religious Education

Appendix F

BASIC STATISTICS ON THE COUNTRIES OF AFRICA*

Country	Total Square Miles (000)	Population 1970 (mill.)	Literacy (%)	GNP-1970 per capita ($)
EASTERN AFRICA				
1. Angola	481	5.7	10-15	210
2. Botswana	232	.6	20	94
3. Burundi	10	3.6	10	60
4. Comoro Islands	1	.3	na	na
5. Ethiopia	472	25.3	5	67
6. French Territory of Afars & Issas	9	.1	10	na
7. Kenya	225	11.2	20-25	137
8. Lesotho	12	1.0	na	100
9. Malagasy Republic	227	7.3	39	106
10. Malawi	45	4.4	15	64
11. Mauritius	1	.8	61	230
12. Mozambique	302	7.7	7	158
13. Reunion	1	.5	52	610
14. Rhodesia (Zimbabwe)	150	5.3	25-30	255
15. Rwanda	10	3.6	10	40
16. Seychelles	.1	.1	50	na
17. Somali Republic	246	2.8	5	63
18. Sudan	967	15.8	10-15	113
19. Swaziland	7	.4	36	180
20. Tanzania	363	13.3	15-20	98
21. Uganda	91	9.8	20-40	116
22. Zambia	291	4.2	28	398
WESTERN AFRICA				
23. Cameroon	183	5.8	10-15	150
24. Centrafican Republic	241	1.5	5-10	130
25. Chad	496	3.7	5-10	70 (1968)
26. Congo (Brazzaville)	132	.9	20	220
27. Dahomey	43	2.5	20	70 (1968)
28. Equatorial Guinea	11	.3	20	290
29. Gabon	103	.5	12	325
30. The Gambia	4	.4	10	100
31. Ghana	92	9.0	25	262
32. Guinea	95	3.9	5-10	104
33. Guinea-Bissau	14	.5	5	200
34. Ivory Coast	125	4.2	20	308
35. Liberia	43	1.5	22	196
36. Mali	479	5.1	5	90
37. Mauritania	398	1.2	1-5	140
38. Niger	489	3.8	5	90
39. Nigeria	357	55.1	25	90
40. Senegal	76	3.9	5-10	186
41. Sierra Leone	28	2.6	10	164
42. Spanish Sahara	103	.1	na	na
43. Togo	22	1.9	5-10	124
44. Upper Volta	106	5.1	5-10	50
45. Zaire	906	17.8	35-40	101

* Includes all political units on the continent of Africa, plus Malagasy Republic, Mauritius, Reunion, Comoro Islands, Seychelles Islands, but excluding Morocco, Algeria, Tunisia, Libya, Egypt, Namibia and South Africa, which are not covered in this report. Source: adapted from United States Department of State, *World Data Handbook* (Washington: Government Printing Office, August, 1972), 19 p.